

ABSTRAK

Putri Haliza Rachma. 2024. **PENGARUH MODEL *PROBLEM BASED HYBRID LEARNING (PRO-BHL)* BERBANTUAN *OLABS* TERHADAP *HIGHER ORDER THINKING SKILLS (HOTS)* PESERTA DIDIK PADA MATERI KALOR DAN PERPINDAHAN KALOR**

Penelitian ini dilatarbelakangi oleh hasil studi pendahuluan di SMA Negeri 1 Talaga, yang menunjukkan bahwa tingkat keaktifan dan *Higher Order Thinking Skills (HOTS)* peserta didik masih rendah. Selain itu, keterbatasan alat praktikum di laboratorium membuat pembelajaran kurang optimal karena jarang melakukan praktikum. Peneliti berupaya mengatasi masalah tersebut dengan menerapkan model *Problem Based Hybrid Learning (Pro-BHL)*. Keterbatasan alat praktikum di laboratorium dapat diatasi dengan praktikum melalui *OLabs*. Penelitian ini bertujuan untuk mengetahui bagaimana pengaruh model Pro-BHL berbantuan *OLabs* terhadap HOTS peserta didik pada materi kalor dan perpindahan kalor. Metode yang digunakan dalam penelitian ini adalah *quasi experiment* dengan desain penelitian *posttest only control group design*. Penelitian ini dilaksanakan di SMA Negeri 1 Talaga dengan populasi penelitian sebanyak 244 peserta didik yang termuat dalam 7 kelas XI MIPA. Pemilihan sampel menggunakan teknik *purposive sampling*, diperoleh kelas XI MIPA 3 sebagai kelas eksperimen dan kelas XI MIPA 2 sebagai kelas kontrol. Untuk mengukur HOTS peserta didik dilakukan tes setelah diberi perlakuan (*posttest*) berbentuk *essay*. Soal yang diberikan berjumlah 6 butir yang mewakili 3 indikator HOTS pada materi kalor dan perpindahan kalor. Teknik analisis data yang digunakan meliputi validasi ahli, uji coba instrumen, analisis keterlaksanaan model pembelajaran, uji prasyarat, dan uji hipotesis. Hasil uji hipotesis menggunakan uji t pada taraf signifikansi ($\alpha = 0,05$) menunjukkan bahwa setelah diterapkannya model Pro-BHL berbantuan *OLabs*, diperoleh hasil $t_{hitung} > t_{tabel}$ yakni $6,65 > 1,67$. Artinya H_0 ditolak dan H_a diterima. Dengan demikian, dapat disimpulkan bahwa model *Problem Based Hybrid Learning (Pro-BHL)* berbantuan *OLabs* berpengaruh secara signifikan terhadap *Higher Order Thinking Skills (HOTS)* peserta didik pada materi kalor dan perpindahan kalor.

Kata kunci: *problem based hybrid learning*, *hots*, *olabs*, kalor dan perpindahan kalor

ABSTRACT

Putri Haliza Rachma. 2024. ***THE EFFECT OF PROBLEM BASED HYBRID LEARNING (PRO-BHL) MODEL ASSISTED BY OLABS ON HIGHER ORDER THINKING SKILLS (HOTS) OF STUDENTS IN HEAT AND HEAT TRANSFER MATERIAL***

This research is motivated by the results of a preliminary study at SMA Negeri 1 Talaga, which indicated that the level of students' activity and Higher Order Thinking Skills (HOTS) remains low. Additionally, the limited of laboratory practicum equipment makes learning less optimal due to infrequent practical activities. Researchers are trying to overcome these problems by applying the Problem Based Hybrid Learning (Pro-BHL) model. The limitation of practicum equipment in the laboratory can be overcome by using OLabs for practical activities. This study aims to determine the effect of the Pro-BHL model assisted by OLabs on students' HOTS in heat and heat transfer material. The method used in this study is quasi experiment with a posttest only control group design. This research was conducted at SMA Negeri 1 Talaga with a research population of 244 students contained in 7 classes XI MIPA. Sample selection using purposive sampling technique, obtained class XI MIPA 3 as an experimental class and class XI MIPA 2 as a control class. To measure students' HOTS, a posttest in the form of an essay was conducted after the treatment. The questions given were 6 items representing 3 indicators of HOTS on heat and heat transfer matter. Data analysis techniques used include expert validation, instrument trials, analysis of learning model implementation, prerequisite tests, and hypothesis tests. The results of the hypothesis test using the t test at the level of significance ($\alpha = 0,05$) showed that after the application of the Pro-BHL model assisted by OLabs, it was obtained $t_{count} > t_{table}$ which was $6,65 > 1,67$ so that it was H_0 is rejected and accepted H_a , So it can be concluded that the Problem Based Hybrid Learning (Pro-BHL) model assisted by OLabs has a significant effect on students' Higher Order Thinking Skills (HOTS) in heat and heat transfer material.

Keywords: problem based hybrid learning, hots, olabs, heat dan heat transfer